

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A light source, comprising:
an array of light emitting diode (LED) dies capable of emitting LED light;
optical couplers for coupling light from respective LED dies;
phosphor patches disposed between the LED dies and the optical couplers to convert at least a portion of the LED light propagating to the optical couplers from respective LED dies;
and
a continuous intermediate layer disposed between the array of LED dies and the phosphor patches, the continuous intermediate layer transmitting the LED light and reflecting light converted in the phosphor patches, the continuous intermediate layer having a first side facing the array of LED dies and a second side facing the couplers, the phosphor patches being disposed on the second side of the continuous intermediate layer.
2. (Canceled)
3. (Original) A light source as recited in claim 1, wherein the LED dies are encapsulated.
4. (Original) A light source as recited in claim 1, wherein the LED dies are disposed on a substrate.
5. (Currently Amended) A light source as recited in claim 4, further comprising at least one standoff disposed between the continuous intermediate layer and the substrate.
6. (Original) A light source as recited in claim 1, wherein the couplers are reflective couplers formed by apertures through a coupler sheet, the apertures having reflective side walls.

7. (Previously Presented) A light source as recited in claim 6, wherein the phosphor patches register with respective apertures.

8. (Currently Amended) A light source as recited in claim 6, wherein the phosphor patches extend into the apertures from the continuous intermediate layer.

9. (Original) A light source as recited in claim 1, further comprising a reflective layer disposed to reflect LED light that has passed through the phosphor layer back to the phosphor layer.

10. (Original) A light source as recited in claim 1, further comprising a set of optical fibers disposed to receive light from respective couplers.

11. (Original) A light source as recited in claim 10, further comprising a power supply connected to provide electrical current to the plurality of LED dies.

12. (Currently Amended) A light source, comprising:
~~two or more~~ an array of light emitting diode (LED) dies to produce LED light;
two or more respective couplers for coupling light from the LED dies;
a continuous intermediate layer disposed between the array of LED dies and the couplers, the continuous intermediate layer being substantially transparent to the LED light; and
a phosphor layer disposed on the continuous intermediate layer, between the continuous intermediate layer and the couplers, for converting at least a portion of the LED light to light at a converted wavelength.

13. (Canceled)

14. (Original) A light source as recited in claim 12, wherein the LED dies are encapsulated.

15. (Original) A light source as recited in claim 12, wherein the LED dies are disposed on a substrate.

16. (Currently Amended) A light source as recited in claim 15, further comprising at least one standoff disposed between the continuous intermediate layer and the substrate.

17. (Original) A light source as recited in claim 12, wherein the couplers are reflective couplers formed by apertures through an aperture sheet, the apertures having reflective side walls.

18. (Currently Amended) A light source as recited in claim 12, wherein the phosphor layer is provided as patches of phosphor-containing material distributed on the continuous intermediate layer, the patches being located at positions corresponding to areas of the continuous intermediate layer illuminated by the LED dies.

19. (Original) A light source as recited in claim 18, wherein the couplers are formed in apertures through an aperture sheet, the patches registering with the apertures.

20. (Currently Amended) A light source as recited in claim 19, wherein the patches of phosphor containing material extend into the apertures from the continuous intermediate layer.

21. (Currently Amended) A light source as recited in claim 19, wherein the continuous intermediate layer reflects light at the converted wavelength.

22. (Original) A light source as recited in claim 19, further comprising a reflective layer disposed to reflect LED light that has passed through the phosphor layer back to the phosphor layer.

23. (Currently Amended) A light source as recited in claim 12, wherein the continuous intermediate layer reflects the converted light.

24. (Original) A light source as recited in claim 12, further comprising a set of optical fibers disposed to receive light from respective optical couplers.

25. (Original) A light source as recited in claim 12, further comprising a power supply connected to provide electrical current to the LED dies.

26. (Currently Amended) A light source, comprising:

an plurality array of light emitting diode (LED) dies capable of emitting LED light;

a continuous intermediate layer disposed over the array of LED dies, the continuous intermediate layer being substantially transparent to the LED light, the LED light propagating through the continuous intermediate layer from a first side of the continuous intermediate layer to a second side of the continuous intermediate layer; and

a phosphor layer disposed on the second side of the continuous intermediate layer.

27. (Canceled)

28. (Currently Amended) A light source as recited in claim 26, wherein the phosphor layer is provided as patches of phosphor-containing material distributed on the continuous intermediate layer, the patches being located at positions corresponding to areas of the continuous intermediate layer illuminated by the LED dies.

29. (Currently Amended) A light source as recited in claim 26, wherein the continuous intermediate layer reflects light converted by the phosphor layer to a longer wavelength than the wavelength of the LED light.

30. (Original) A light source as recited in claim 26, further comprising a reflective layer disposed to reflect LED light that has passed through the phosphor layer back to the phosphor layer.

31. (Original) A light source as recited in claim 26, wherein the LED dies are arranged on a substrate.

32. (Currently Amended) A light source as recited in claim 31, further comprising at least one stand-off between the substrate and the continuous intermediate layer.

33. (Currently Amended) A method of assembling a light source, comprising:
providing an plurality array of light emitting diode (LED) dies capable of emitting LED light;

disposing a layer of phosphor on a continuous intermediate layer, the continuous intermediate layer being substantially transparent to the LED light;

positioning the continuous intermediate layer and the layer of phosphor over the array of LED dies so that LED light passes through the continuous intermediate layer from the LED dies to the layer of phosphor.

34. (Currently Amended) A method as recited in claim 33, wherein disposing the layer of phosphor on the continuous intermediate layer comprises disposing the layer of phosphor as patches on a surface of the continuous intermediate layer, the positions of the patches on the continuous intermediate layer corresponding to areas where light passes from the LED dies through the continuous intermediate layer.

35. (Canceled)

36. (Currently Amended) A method as recited in claim 33, wherein providing the plurality array of LED dies comprises providing the plurality array of LED dies on an LED subassembly, and further comprising attaching the LED subassembly to the continuous intermediate layer.

37. (Currently Amended) A method as recited in claim 36, wherein one of the LED subassembly and the continuous intermediate layer comprises a plurality of stand-offs, and

attaching the LED subassembly to the continuous intermediate layer comprises attaching the standoffs to the other of the LED subassembly and the continuous intermediate layer.

38. (Currently Amended) A method as recited in claim 33, wherein providing the continuous intermediate layer comprises providing a continuous intermediate layer that transmits the LED light and that reflects light that is wavelength converted in the phosphor layer.

39. (Original) A method as recited in claim 33, further comprising providing a reflector layer to reflect LED light that has passed through the phosphor layer back to the phosphor layer.